Claims

1. (Cancelled) A genetically altered chondrocyte used for expressing a therapeutic agent, wherein the genetically altered chondrocyte, when delivered to a target region having one or more cells associated with a disorder, expresses the therapeutic agent in such a way as to modify an environment surrounding the one or more cells, wherein

   (a) said environment is an atypical chondrocyte environment; and

   (b) wherein the genetically altered chondrocyte does not become a structural component of the environment.

2. (Cancelled) The genetically altered chondrocyte of claim 1, wherein the chondrocyte produces a therapeutic agent selected from the group consisting of a protein, an antibody, a mimetibody, an antigen, a hormone, an anti-inflammatory agent, an antiviral agent, an anti-bacterial agent, a growth factor, a cytokine, an oncogene, a tumor suppressor, a transmembrane receptor, an adhesion molecule, a neurotransmitter, a morphogenetic protein, a differentiation factor, an enzyme, and an extracellular matrix protein.

3. (Cancelled) The genetically altered chondrocyte of claim 1, wherein the therapeutic agent is an Erythropoietin protein.

4. (Cancelled) The genetically altered chondrocyte of claim 1, wherein the therapeutic agent is an Erythropoietin mimetibody.

5. (Previously Cancelled) The genetically altered chondrocyte of claim 5, wherein the cell associated with a disorder is in an atypical chondrocyte environment.

6. (Cancelled) The genetically altered chondrocyte of claim 1, wherein the atypical chondrocyte environment is in an organ selected from the group consisting of the brain, heart, liver, kidney, gastro-intestinal tract, spleen, smooth muscles, skeletal muscles, eye, ganglions, lungs, gonads, and pancreas.

7. (Cancelled) The genetically altered chondrocyte of claim 1, wherein the atypical chondrocyte environment is an aqueous environment selected from the group consisting of blood and plasma.

8. (Cancelled) The genetically altered chondrocyte of claim 1, wherein the cell associated with a disorder is in a typical chondrocyte environment.

9. (Cancelled) The genetically altered chondrocyte of claim 8, wherein the typical chondrocyte environment is selected from the group consisting of bone, tendon and cartilage.

10. (Cancelled) The genetically altered chondrocyte of claim 1, further comprising a biocompatible substrate mixed therewith.

11. (Cancelled) The genetically altered chondrocyte of claim 10, wherein the biocompatible substrate is gel matrix substrate.

12. (Cancelled) The genetically altered chondrocyte of claim 1, wherein the cell associated with a disorder is a cell selected from the group consisting of a cell associated with a blood disorder, a cell associated with a cardiovascular disorder, a cell associated with an endocrine disorder, a cell associated with an autoimmune disorder, a cell associated with a neurological disorder, a cell associated with a skin disorder, a cell associated with fertility disorder, and a cell associated with reproduction.

13. (Cancelled) A genetically altered chondrocyte used for expressing a therapeutic agent in an environment surrounding a cell associated with a disorder, wherein the genetically altered chondrocyte is effective to be delivered to the environment and expresses the therapeutic agent to modify the environment surrounding the cell, and wherein the genetically altered chondrocyte does not become a structural component of the environment.

14. (Cancelled) The genetically altered chondrocyte of claim 13, wherein the chondrocyte produces a therapeutic agent selected from the group consisting of a protein, an antibody, a mimetibody, an antigen, a hormone, an anti-inflammatory agent, an antiviral agent, an anti-bacterial agent, a growth factor, a cytokine, an oncogene, a tumor suppressor, a transmembrane receptor, an adhesion molecule, a neurotransmitter, a morphogenetic protein, a differentiation factor, an enzyme, and an extracellular matrix protein.

15. (Cancelled) The genetically altered chondrocyte of claim 13, wherein the therapeutic agent is an Erythropoietin protein.

16 (Cancelled) The genetically altered chondrocyte of claim 13, wherein the therapeutic agent is an Erythropoietin mimetibody.

17. (Cancelled) The genetically altered chondrocyte of claim 13, wherein the target region is in an atypical chondrocyte environment.

18. (Cancelled) The genetically altered chondrocyte of claim 17, wherein the atypical chondrocyte environment is in an organ selected from the group consisting of the brain, heart, liver, kidney, gastro-intestinal tract, spleen, smooth muscles, skeletal muscles, eye, ganglions, lungs, gonads, and pancreas.

19. (Cancelled) The genetically altered chondrocyte of claim 17, wherein the atypical chondrocyte environment is an aqueous environment selected from the group consisting of blood and plasma.

20. (Cancelled) The genetically altered chondrocyte of claim 13, wherein the target region is in a typical chondrocyte environment.

21. (Cancelled) The genetically altered chondrocyte of claim 20, wherein the typical chondrocyte environment is selected from the group consisting of bone, tendon, and cartilage.

22. (Cancelled) The genetically altered chondrocyte of claim 13, further comprising a biocompatible substrate mixed therewith.

23. (Cancelled) The genetically altered chondrocyte of claim 22, wherein the biocompatible substrate is gel matrix substrate.

24. (Cancelled) The genetically altered chondrocyte of claim 13, wherein the disorder is selected from the group consisting of a blood disorder; a cardiovascular disorder; an endocrine disorder; an autoimmune disorder; a neurological disorder; a skin disorder; a fertility disorder and reproduction.

25. (New) A composition comprising:

(a) a biocompatible substrate; and

(b) a genetically altered chondrocyte modified to express a therapeutic agent, the genetically altered chondrocyte being mixed with the biocompatible substrate;

wherein the composition, when delivered to an atypical chondrocyte environment, allows for the delivery of the therapeutic agent.

26. (New) The composition of claim 25, further being adapted to deliver the therapeutic agent to a target region and being capable of modifying the one or more cells of the target region.

27. (New) The composition of claim 25, further being adapted to deliver the therapeutic agent to an environment surrounding a cell associated with a disorder, and being capable of modifying the environment surrounding the cell.

28. (New) The composition of claim 25, wherein the chondrocyte produces a therapeutic agent selected from the group consisting of a protein, an antibody, a mimetibody, an antigen, a hormone, an anti-inflammatory agent, an antiviral agent, an anti-bacterial agent, a growth factor, a cytokine, an oncogene, a tumor suppressor, a transmembrane receptor, an adhesion molecule, a

neurotransmitter, a morphogenetic protein, a differentiation factor, an enzyme, and an extracellular matrix protein.

29. (New) The composition of claim 25, wherein the therapeutic agent is an Erythropoietin protein.

30. (New) The composition of claim 25, wherein the therapeutic agent is an Erythropoietin mimetibody.

31. (New) The composition of claim 25, wherein the atypical chondrocyte environment is in an organ selected from the group consisting of the brain, heart, liver, kidney, gastro-intestinal tract, spleen, smooth muscles, skeletal muscles, eye, ganglions, lungs, gonads, and pancreas.

32. (New) The composition of claim 25, wherein the atypical chondrocyte environment is an aqueous environment selected from the group consisting of blood and plasma.

33. (New) The composition of claim 25, wherein the biocompatible substrate is gel matrix substrate.